10/577758 IAP17 Rec'd PCT/PTO 28 APR 2006

IN THE CLAIM

Please amend the claims as follows:

- 1. (original) A rewritable optical data storage medium (20) for high-speed recording by means of a focused radiation beam (10), said medium comprising a substrate (7) carrying a stack (2) of layers, which stack comprises, a substantially transparent first auxiliary layer I1 (3), a substantially transparent second auxiliary layer I2 (5) having a thickness d_{12} , and a recording layer (4) of a phase-change material comprising a composition $Ge_xSn_ySb_{1-x-y}$, where 0.05 < x < 0.30 and 0.15 < y < 0.30, which recording layer is interposed between I1 and I2, and a third auxiliary layer I3 (6) with a thickness d_{13} acting as a heat sink and being present at a side of I2 opposite to the side of the recording layer, characterized in that $\lambda_{12}/d_{12} > 5*10^8$ W m⁻² K⁻¹, in which formula λ_{12} is the heat conduction coefficient of the material of the I2 layer.
- 2. (original) An optical data storage medium (20) as claimed in Claim 1, wherein the second auxiliary layer I2 mainly comprises $(ZnS)_{80} (SiO_2)_{20} \ and \ d_{I2} \ < \ 10 \ nm \, .$
- 3. (original) An optical data storage medium (20) as claimed in Claim 1, wherein the second auxiliary layer I2 comprises at least

one selected from the group of Ge_3N_4 , Si_3N_4 , Al_2O_3 , Hf_xN_y , ITO $(In_2O_3:Sn)$ and Ta_2O_5 .

- 4. (currently amended) An optical data storage medium (20) as claimed in any one of Claims 1, 2 or 3claim 1, wherein the recording layer (4) has a thickness d_P and d_P is smaller than 15 nm.
- 5. (currently amended) An optical data storage medium (20) as claimed in any one of Claims 1, 2, 3 or 4claim 1, wherein the recording layer additionally comprises at least one selected from In, Ag or Cu.
- 6. (original) An optical data storage medium (20) as claimed in Claim 5, wherein the at least one is present in a concentration up to 10 at.%.
- 7. (original) An optical data storage medium (20) as claimed in Claim 1, wherein the third auxiliary layer I3 mainly comprises Ag.
- 8. (original) An optical data storage medium (20) as claimed in Claim 7, wherein the thickness $d_{\rm I3}$ of the third auxiliary layer I3 is at least 150 nm.

- 9. (currently amended) An optical data storage medium (20) as claimed in any one of Claims 1 to 8claim 1, wherein a substantially transparent fourth auxiliary layer I4 (8) is present between the third auxiliary layer I3 (6) and the second auxiliary layer I2 (5) screening the third auxiliary layer I3 from a chemical influence of the second auxiliary layer I2.
- 10. (original) An optical data storage medium as claimed in Claim 9, wherein the fourth auxiliary layer I4 (8) comprises at least one of Si_3N_4 or Ge_3N_4 .
- 11. (original) An optical data storage medium as claimed in Claim 10, wherein the fourth auxiliary layer I4 has a thickness $d_{I4} \leq 3$ nm.
- 12. (currently amended) Use of an optical data storage medium (20) according to any one of the preceding Claimsclaim 1 for high speed recording with a recording speed of at least 35 m/s.